

## HIGH-FIDELITY TRANSCODING

### **ABSTRACT**

High-fidelity transcoding techniques are described. For example, a video

5 transcoder obtains re-coding data set elements for source format compressed video and uses the elements for coding decisions and/or equivalent parameters when compressing the video in a target format. This allows syntax elements and coding decisions to be maintained across the two formats, including picture types, intra/inter macroblock coding types, field/frame coding decisions, and/or quantization levels. This helps the

10 transcoder match quality in the compressed video between the source and target formats, reducing transcoding losses. At the same time, the transcoder gives the target format encoder the freedom to exploit additional compression opportunities to reduce overall bitrate. The transcoder may apply proportional rate control so as to produce output at a constant or relatively constant bitrate.